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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,922	10/20/2003	Tao-Ping Wang	N1085-00026	4871
8933	7590	04/15/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT ONE LIBERTY PLACE PHILADELPHIA, PA 19103-7396			NGUYEN, HIEP	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,922	Applicant(s) WANG, TAO-PING	
	Examiner Hiep Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION:

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 22 and 23 is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 15, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US Pat. 6,744,296).

Regarding claim 13, figure 7 of Chen shows a device to control a sense amplifier comprising; a D flip-flop (160), having a first input (D) coupled to a second input (CLK) and a third input (CLR) coupled to the output of the sense amplifier. The output (Q) is coupled to the input of the sense amplifier (190). Figure 7 of Chen does not show that the first input (D) is coupled to ground as called for in claim 13. However, the connection of the D flip-flop of Chen and the limitation of having a D input of the D flip-flop of the circuit of the present application coupled to ground appears to be complement of one another. For instance, the D input of the invention is connected to ground and the output of the flip-flop is the QB output where as, in Chen, the D input is coupled to Vdd and the output is taken at the Q node. Since they are complimentary of each other, the substitution of one for the other would not alter the overall operation. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to modify Chen's D flip-flop connection to its complementary arrangement, yet overall operation remains unchanged. Outside of the non-obvious results, the obviousness of connecting D input to ground in a complementary manner will not be patentable under 35 U.S.C 103(a).

Regarding claims 14 and 16-9, the functioning described is merely an operation of the basic D flip-flop. The start signal (input) is a triggered clock. The recitation "pseudo word line signal" in claim 17 is merely is merely an intended use. It has been held that a recitation with

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respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQF.2d 1647 (1987). The third input (CLR) is a reset signal.

Allowable Subject Matter

Claims 15, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-12, 22 and 23 are allowed.

Claims 1-12, 22 and 23 are allowed because the prior art (US Pat. 6,744,296) fails to teach or suggest a device to control a sense amplifier comprising a reset signal generator as called for in claim 1; a device to control a sense amplifier comprising first to fourth pass gates, first to sixth inverters and a NAND gate as called for in claim 22.

Claims 15, 20 and 21 are objected to because the prior art (US Pat. 6,744,296) fails to teach or suggest a device to control a sense amplifier comprising first to fourth pass gates, first to sixth inverters and a NAND gate as called for in claim 20.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

04-12-05



TUAN T. LAM
PRIMARY EXAMINER